Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Currently Amended) A compound of Formula I

$$\begin{array}{c|c}
R^1 & H \\
\hline
 & 1 \\
\hline
 & 2 \\
\hline
 & 5 \\
\hline
 & 4 \\
\hline
 & R^3
\end{array}$$

$$\begin{array}{c}
A \\
W' \\
Q!$$

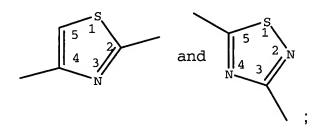
wherein A is O or S;

wherein Q is selected from -N(R 5)₂, -NR 5 C(O)R 5 , -(C₁-C₈)alkyl-OR 5 , -

(C₁-C₈)alkyl-S(O)_nR⁶, substituted aryl, an unsubstituted or substituted monocyclic or bicyclic, non-aromatic carbocyclic ring, an unsubstituted or substituted monocyclic or bicyclic, heteroaryl ring, and an unsubstituted or substituted monocyclic or bicyclic, non-aromatic heterocyclic ring, wherein a ring is unsubstituted or substituted with one or more groups selected from halo, (C₁-C₈)alkyl, (C₂-C₈)alkynyl, (C₂-C₈)alkenyl, -OR⁵, -O-(CH₂)₁₋₂-O-, -N(R⁵)₂, -(C₁-C₈)alkyl-N(R⁵)₂, (C₁-C₈)haloalkyl, lower cyanoalkyl, -(C₁-C₈)alkyl-OR⁵, lower alkylaminoalkoxy, lower aminoalkoxyalkyl, -(C₁-C₈)alkyl-

 $S(O)_nR^5$, $-N(R^5)-(C_1-C_8)$ alkyl- $N(R^5)_2$, $-N(R^5)-(C_1-C_8)$ alkyl- OR^5 , $-N(R^5)-(C_1-C_8)$ alkyl- $NHC(O)R^5$, $-N(R^5)-(C_1-C_8)$ alkyl- $C(O)N(R^5)_2$, lower alkoxyalkyl, $-S(O)_nR^5$, $-SO_2NR^5R^5$, $-NR^5S(O)_nR^5$, cyano, nitro, optionally substituted (C_3-C_{10})cycloalkyl, optionally substituted aryl, optionally substituted 4-7 membered heterocyclyl, optionally substituted phenoxyalkyl, optionally substituted heterocyclyloxyalkyl, $-C(O)N(R^5)_2$, $-CO_2R^5$, $-CO_2N(R^5)_2$, $-SO_2NHC(O)R^5$, optionally substituted phenylalkyl, optionally substituted heterocyclylalkyl, $-NR^5C(O)N(R^5)_2$, $-NR^5CO_2R^5$ and $-C(O)R^5$;

wherein W is selected from



wherein n is 0, 1 or 2;

wherein R^1 is selected from H, -OR 6 , halo, aryl, (C_1 - C_8)alkyl, (C_2 - C_8)alkenyl, (C_2 - C_8)alkynyl, (C_1 - C_8)perfluoroalkyl, -NR 5 ₂, -(C_1 - C_8)alkyl-NR 5 ₂, -(C_1 - C_8)alkyl-OR 5 , -S(O)_n-alkyl, -S(O)_n-aryl, -S(O)_n-heteroaryl, (C_3 - C_1)cycloalkyl, nitro, heterocyclyl, -NR 5 SO₂R 5 , -C(O)N(R 5)₂, -CO₂R 5 , -(CR 5 ₂)₁₋₈aryl, -(CR 5 ₂)₁₋₈heterocyclyl, -NR 5 C(O)N(R 5)₂, -NR 5 C(O)R 5 , -NR 5 CO₂R 5 , and -C(O)R 5 ; wherein R 1 and R 2 may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R 2 is selected from H, -OR 6 , halo, aryl, (C_1 - C_8)alkyl, (C_2 - C_8)alkenyl, (C_2 - C_8)alkynyl, (C_1 - C_8)perfluoroalkyl, -NR 5 ₂, -(C_1 - C_8)alkyl-NR 5 ₂, -(C_1 - C_8)alkyl-OR 5 , -S(O)_n-alkyl, -S(O)_n-aryl, -S(O)_n-heteroaryl, (C_3 - C_1 0)cycloalkyl, nitro, heterocyclyl, -NR 5 SO₂R 5 ,

-C(O)N(R⁵)₂, -CO₂R⁵, -(CR⁵₂)₁₋₈aryl, -(CR⁵₂)₁₋₈heterocyclyl, - $NR^{5}C(O)N(R^{5})_{2}$, $-NR^{5}C(O)R^{5}$, $-NR^{5}CO_{2}R^{5}$, and $-C(O)R^{5}$; wherein R³ is selected from H, -OR⁶, halo, aryl, (C₁-C₈)alkyl, (C₂-C₈)alkenyl, (C₂-C₈)alkynyl, (C₁-C₈)perfluoroalkyl, -NR⁵₂, -(C₁- C_8)alkyl-NR⁵₂, -(C_1 - C_8)alkyl-OR⁵, -S(O)_n-alkyl, -S(O)_n-aryl, -S(O)_nheteroaryl, (C₃-C₁₀)cycloalkyl, nitro, heterocyclyl, -NR⁵SO₂R⁵, -C(O)N(R⁵)₂, -CO₂R⁵, -(CR⁵₂)₁₋₈aryl, -(CR⁵₂)₁₋₈heterocyclyl, - $NR^5C(O)N(R^5)_2$, $-NR^5C(O)R^5$, $-NR^5CO_2R^5$, and $-C(O)R^5$; wherein R² and R³ may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R⁴ is independently selected from H, and (C₁-C₆)alkyl; wherein R⁵ is independently selected from H, lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆ cycloalkyl-alkyl, lower alkylamino-lower alkyl, aryloxyalkyl, alkylcarbonylalkyl, and lower perfluoroalkyl; and wherein R⁶ is independently selected from lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆ cycloalkyl-alkyl, lower alkylamino-lower alkyl, aryloxyalkyl, alkylcarbonylalkyl, and lower perfluoroalkyl; wherein each aryl, heteroaryl, cycloalkyl, and heterocyclyl moiety of any R1, R2, R3, R5, R6, and Q is optionally substituted with one or more groups selected from halo, -NH₂, -OH, -CO₂H, (C₁- C_6)alkylamino, (C_1-C_6) alkoxy, (C_1-C_6) alkoxyalkyl, (C_1-C_6) alkyl, di(C₁-C₆)alkylamino, phenyl, and heterocyclyl; and pharmaceutically acceptable derivatives salts thereof;

provided R¹ is not CF₃ when R² is ethoxycarbonyl, when R³ is H, when W is thiazol-4-yl and when Q is 4-pyridyl or 2-chloro-4-pyridyl; further provided Q is not 4-pyridyl, when W is thiazol-2-yl, when R¹, R³, and R² are H; further provided Q is not 2-nitro-5-furyl when W is thiazol-2-yl, when R¹ is methyl, when R³ is H, and when R² is H; further provided Q is not phenyl when W is thiazol-2-yl, when R¹ is methyl, when R³ is methyl, and when R² is H; further provided Q is not phenyl, 3,4-diacetylphenyl or 3,4-dihydroxyphenyl, when W is thiazol-2-yl, when R¹ is H, when R³ is H, and when R² is H; and further provided Q is not 3-cyano-6-methyl-2-oxo-1,2-dihydro-5-pyridyl, when W is thiazol-2-yl, when R¹ is methyl, when R³ is H, and when R² is acetyl.

2. (Currently Amended) <u>A</u> Compound of Claim 1 wherein Q is selected from

3. (Currently Amended) <u>A Compound of Claim 2 wherein Q is</u> selected from phenylsulfonylamino, N-methyl-N-(2-pyridylsulfonyl)amino, N-methyl-N-(3-pyridylsulfonyl)amino, N-methyl-N-(4-pyridylsulfonyl)amino, N-methyl-N-(2-thienylsulfonyl)amino, N-

methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 3-pyridylsulfonylmethyl, 4-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, 3-trifluoromethylbenzyl-sulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 4-chlorophenylmethylsulfonylmethyl, 2-thienyl, 3-(4-chlorophenylsulfonylmethyl)-2-thienyl, phenyl substituted with one or more substituents selected from hydroxyl, chloro, fluoro, methoxy, -O-CH₂-O-, amino, aminomethyl, methylsulfonyl, methyl, cyano, trifluoromethyl, and pyrrolyl, unsubstituted pyridyl, and

- 4-pyridyl substituted with one or more substituents selected from chloro, fluoro, methyl, ethyl, -NH₂, methoxy, ethoxy, -OH, -CO₂H, phenoxyethylamino, methylamino, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylamino, diethylaminoethylamino, methylamino, methylamino, methylamino, methylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and pharmaceutically acceptable derivatives salts thereof.
- 4. (Currently Amended) <u>A</u> Compound of Claim 1, and pharmaceutically acceptable derivatives salts thereof, wherein W is thiazol-4-yl.
 - 5. (Currently Amended) \underline{A} Compound of Claim 1 wherein R^1 is selected from (C_1-C_6) alkyl, $-(C_1-C_4)$ alkyl- $N(R^5)_2$, $-(C_1-C_4)$ alkyl- OR^5 , $-(C_3-C_5)$ cycloalkyl, and $-CF_3$;

wherein R² is selected from H, halo, (C₁-C₃)alkyl, -NR⁵₂, -OR⁶, -(C₁- C_3)alkyl- OR^5 , - $C(O)N(R^5)_2$, - CO_2R^5 , - $(CH_2)_{1:3}$ - $(5-6 membered)_2$ saturated or partially unsaturated) heterocyclyl, -NHC(O)R⁵, and - $C(O)R^5$;

wherein R¹ and R² may be joined together with the pyridone ring to form optionally substituted 2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, optionally substituted 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, optionally substituted 5,6,7,8tetrahydro-1H-quinolin-2-one, optionally substituted 7,8-dihydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one;

wherein R³ is H;

wherein R⁵ is independently selected from H, C₁-C₄-alkyl, optionally substituted phenyl, optionally substituted benzyl, optionally substituted heterocyclyl selected from piperazinyl, morpholinyl, pyrrolidinyl, and piperidinyl, optionally substituted pyridyl-(C₁-C₃)alkyl, optionally substituted piperazinyl-(C₁-C₃)-alkyl, 4-morpholinyl- (C_1-C_3) -alkyl, pyrrolidinyl- (C_1-C_3) -alkyl, 1-piperidinyl- (C_1-C_3) -alkyl, optionally substituted C₃-C₆ cycloalkyl-(C₁-C₃)-alkyl, -(C₁-C₃)-alkyl- $N-((C_1-C_3)-alkyl)_2$ and $-(C_1-C_3)-alkyl-NH-(C_1-C_3)-alkyl;$ and pharmaceutically acceptable derivatives salts thereof.

6. (Currently Amended) A Compound of Claim 5 wherein R¹ is selected from methyl, ethyl, propyl, isopropyl, hydroxyethyl, dimethylaminomethyl, benzyloxymethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl, and -CF₃; wherein R² is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl,

isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4-morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4-piperazinylcarbonyl;

wherein R¹ and R² may be joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and pharmaceutically acceptable derivatives salts thereof.

7. (Currently Amended) A Compound of Claim 4, and pharmaceutically acceptable derivatives salts thereof, wherein A is O; wherein Q is selected from N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from chloro, fluoro, and -O-CH₂-O-, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino. pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; wherein R¹ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, hydroxyethyl, benzyloxymethyl, 4-methoxybenzyloxymethyl, methoxymethyl, cyclopropyl, and -CF₃; wherein R² is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4-morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4piperazinylcarbonyl;

wherein R¹ and R² may be joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-

quinolin-2-one, 5-propylimino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and wherein R³ is H.

- 8. (Currently Amended) <u>A</u> Compound of Claim 1 wherein A is O; and pharmaceutically acceptable derivatives <u>salts</u> thereof.
- 9. (Currently Amended) A compound of Claim 1 having Formula II

wherein R^7 is selected from -(C₁-C₃)alkyl, -(C₁-C₃)alkyl-N(R^{10})₂, -(C₁-C₃)alkyl-OR¹⁰, -(C₃-C₅)cycloalkyl, and -CF₃;

wherein R^8 is selected from $R^{10}SO_2$ -(C_1 - C_6)alkyl-, $R^{11}SO_2NH$ -

CH₃, substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl;

wherein R^9 is selected from H, halo, (C_1-C_3) alkyl, $-NR^{10}_2$, $-(C_1-C_3)$ alkyl- OR^{10} , $-C(O)N(R^{10})_2$, $-CO_2R^{10}$, $(CH_2)_{1-3}$ -(5-6 membered saturated or partially unsaturated heterocyclyl, $-NHC(O)R^{10}$, and $-C(O)R^{10}$;

wherein R^{10} is independently selected from H, (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and

wherein R^{11} is independently selected from (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl, and optionally substituted heterocyclyl selected from pyridyl and thienyl;

and pharmaceutically acceptable derivatives salts thereof; provided R⁷ is not CF₃ when R⁹ is ethoxycarbonyl and when R⁸ is 4-pyridyl or 2-chloro-4-pyridyl.

10. (Currently Amended) A Compound of Claim 9 wherein R⁷ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, benzyloxymethyl, hydroxyethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl, and –CF₃; wherein R⁸ is selected from N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from chloro, fluoro, and -O-CH₂-O-, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and wherein R⁹ is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4-morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof.

11. (Currently Amended) A compound of Claim 1 having Formula III

wherein R⁸ is selected from R¹¹SO₂-(C₁-C₆)alkyl-, R¹¹SO₂NH-

 $^{R^{11}O_2S}$ N CH_3 , substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl;

wherein ring A together with the pyridone ring forms optionally substituted 2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, optionally substituted 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-quinolin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and wherein R¹¹ is independently selected from (C₁-C₄)alkyl, optionally substituted phenyl, optionally substituted phenyl-(C₁-C₂)alkyl, optionally substituted C₃-C₆ cycloalkyl-(C₁-C₂)-alkyl, (C₁-C₃)alkylamino-(C₁-C₃)-alkyl-, phenyloxy-(C₁-C₃)alkyl, (C₁-C₂)alkylcarbonyl-(C₁-C₂)alkyl, and optionally substituted heterocyclyl selected from pyridyl and thienyl;

and pharmaceutically acceptable derivatives salts thereof.

12. (Currently Amended) <u>A</u> Compound of Claim 11 wherein R⁸ is selected from N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl,

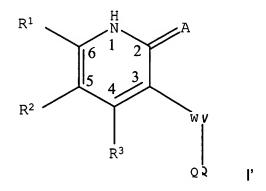
(1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from chloro, fluoro, and -O-CH₂-O-,

unsubstituted pyridyl, and

- 4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylamino, diethylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylaminoethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and pharmaceutically acceptable derivatives salts thereof.
- 13. (Currently Amended) <u>A</u> Compound of Claim 12 and pharmaceutically acceptable <u>derivatives</u> <u>salts</u> thereof selected from:
- Phenylmethyl 2-oxo-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,5,6,7,8-pentahydropyridino[3,2-c]pyridine-6-carboxylate;
- 3-(2-(4-Pyridyl)-1,3-thiazol-4-yl)-1,7,8-trihydro-5H-pyrano[4,3-b]pyridin-2-one;
- 7-Ethyl-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,5,6,7,8-pentahydropyridino[3,2-c]pyridin-2-one;
- tert-Butyl 2-oxo-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,5,6,7,8-pentahydropyridino[3,2-c]pyridine-6-carboxylate;

3-(2-(4-Pyridyl)-1,3-thiazol-4-yl)-1,5,6,7,8-pentahydropyridino[3,2-c]pyridin-2-one, dihydrochloride; and 6-Methyl-3-(2-pyridin-4-yl-thiazol-4-yl)-5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one.

14. (Currently Amended) A compound of Formula I'

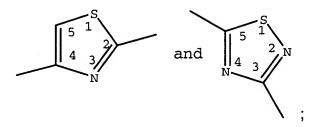


wherein A is O or S; wherein Q is selected from $-N(R^5)_2$, $-NR^5C(O)R^5$, $-(C_1-C_8)alkyl-OR^5$, -

(C₁-C₈)alkyl-S(O)_nR⁶, substituted aryl, an unsubstituted or substituted monocyclic or bicyclic, non-aromatic carbocyclic ring, an unsubstituted or substituted monocyclic or bicyclic, heteroaryl ring, and an unsubstituted or substituted monocyclic or bicyclic or bicyclic, non-aromatic heterocyclic ring, wherein a ring is unsubstituted or substituted with one or more groups selected from halo, (C₁-C₈)alkyl, (C₂-C₈)alkynyl, (C₂-C₈)alkenyl, -OR⁵, -O-(CH₂)₁₋₂-O-, -N(R⁵)₂, -(C₁-C₈)alkyl-N(R⁵)₂, (C₁-C₈)haloalkyl, lower cyanoalkyl, -(C₁-C₈)alkyl-OR⁵, lower alkylaminoalkoxy, lower aminoalkoxyalkyl, -(C₁-C₈)alkyl-S(O)_nR⁵, -N(R⁵)-(C₁-C₈)alkyl-N(R⁵)₂, -N(R⁵)-(C₁-C₈)alkyl-OR⁵, -N(R⁵)-(C₁-C₈)alkyl-NHC(O)R⁵, -N(R⁵)-(C₁-C₈)alkyl-C(O)N(R⁵)₂,

lower alkoxyalkyl, $-S(O)_nR^5$, $-SO_2NR^5R^5$, $-NR^5S(O)_nR^5$, cyano, nitro, optionally substituted (C_3 - C_{10})cycloalkyl, optionally substituted aryl, optionally substituted 4-7 membered heterocyclyl, optionally substituted phenoxyalkyl, optionally substituted heterocyclyloxyalkyl, $-C(O)N(R^5)_2$, $-CO_2R^5$, $-CO_2N(R^5)_2$, $-SO_2NHC(O)R^5$, optionally substituted phenylalkyl, optionally substituted heterocyclylalkyl, $-NR^5C(O)N(R^5)_2$, $-NR^5CO_2R^5$ and $-C(O)R^5$;

wherein W is selected from



wherein n is 0, 1 or 2;

wherein R¹ is selected from H, -OR⁶, halo, aryl, (C₁-C₈)alkyl, (C₂-C₈)alkenyl, (C₂-C₈)alkynyl, (C₁-C₈)perfluoroalkyl, -NR⁵₂, -(C₁-C₈)alkyl-NR⁵₂, -(C₁-C₈)alkyl-OR⁵, -S(O)_n-alkyl, -S(O)_n-aryl, -S(O)_n-heteroaryl, (C₃-C₁₀)cycloalkyl, nitro, heterocyclyl, -NR⁵SO₂R⁵, -C(O)N(R⁵)₂, -CO₂R⁵, -(CR⁵₂)₁₋₈aryl, -(CR⁵₂)₁₋₈heterocyclyl, -NR⁵C(O)N(R⁵)₂, -NR⁵C(O)R⁵, -NR⁵CO₂R⁵, and -C(O)R⁵; wherein R¹ and R² may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R² is selected from H, -OR⁶, halo, aryl, (C₁-C₈)alkyl, (C₂-C₈)alkenyl, (C₂-C₈)alkynyl, (C₁-C₈)perfluoroalkyl, -NR⁵₂, -(C₁-C₈)alkyl-NR⁵₂, -(C₁-C₈)alkyl-OR⁵, -S(O)_n-alkyl, -S(O)_n-aryl, -S(O)_n-heteroaryl, (C₃-C₁₀)cycloalkyl, nitro, heterocyclyl, -NR⁵SO₂R⁵, -C(O)N(R⁵)₂, -CO₂R⁵, -(CR⁵₂)₁₋₈aryl, -(CR⁵₂)₁₋₈heterocyclyl, -NR⁵SC(O)N(R⁵)₂, -NR⁵C(O)R⁵, -NR⁵CO₂R⁵, and -C(O)R⁵;

wherein R^3 is selected from H, -OR 6 , halo, aryl, $(C_1\text{-}C_8)$ alkyl, $(C_2\text{-}C_8)$ alkenyl, $(C_2\text{-}C_8)$ alkynyl, $(C_1\text{-}C_8)$ perfluoroalkyl, -NR 5 2, - $(C_1\text{-}C_8)$ alkyl-NR 5 2, - $(C_1\text{-}C_8)$ alkyl-OR 5 , -S(O)_n-alkyl, -S(O)_n-aryl, -S(O)_n-heteroaryl, $(C_3\text{-}C_{10})$ cycloalkyl, nitro, heterocyclyl, -NR 5 SO₂R 5 , -C(O)N(R 5)2, -CO₂R 5 , - $(CR^5$ 2)₁₋₈aryl, - $(CR^5$ 2)₁₋₈heterocyclyl, -NR 5 C(O)N(R 5)2, -NR 5 C(O)R 5 , -NR 5 CO₂R 5 , and -C(O)R 5 ; wherein R 2 and R 3 may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R 4 is independently selected from H, and $(C_1\text{-}C_6)$ alkyl; wherein R 5 is independently selected from H, lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆

C₆)alkyl, (C₁-C₆)alkylamino-(C₁-C₆)alkyl, aryloxyalkyl, alkylcarbonylalkyl, and lower perfluoroalkyl; and

wherein R^6 is independently selected from lower alkyl, optionally substituted aryl, optionally substituted aryl- $(C_1$ - C_6)alkyl, optionally substituted heterocyclyl- $(C_1$ - C_6)alkyl, optionally substituted C_3 - C_6 cycloalkyl, optionally substituted C_3 - C_6 cycloalkyl- $(C_1$ - C_6)alkyl, $(C_1$ - C_6)alkylamino- $(C_1$ - C_6)alkyl, aryloxy- $(C_1$ - C_6)alkyl, $(C_1$ - C_6)alkylcarbonyl- $(C_1$ - C_6)alkyl, and lower perfluoroalkyl;

cycloalkyl-alkyl, lower aminoalkyl, aryl-(C₁-C₆)alkylamino-(C₁-

wherein each aryl, heteroaryl, cycloalkyl, and heterocyclyl moiety of any R¹, R², R³, R⁵, R⁶, and Q is optionally substituted with one or more groups selected from halo, -NH₂, -OH, oxo, -CO₂H, (C₁-C₆)alkylamino, (C₁-C₆)alkoxy, (C₁-C₆)alkoxyalkyl, (C₁-C₆)alkyl, di(C₁-C₆)alkylamino, phenyl, and heterocyclyl;

and pharmaceutically acceptable derivatives salts thereof;

provided R^1 is not CF_3 when R^2 is ethoxycarbonyl, when R^3 is H, when W is thiazol-4-yl and when Q is 4-pyridyl or 2-chloro-4-pyridyl; further provided Q is not 4-pyridyl, when W is thiazol-2-yl, when R^1 , R^3 , and R^2 are H; further provided Q is not 2-nitro-5-furyl when W is thiazol-2-yl, when R^1 is methyl, when R^3 is H, and when R^2 is H; further provided Q is not phenyl when W is thiazol-2-yl, when R^1 is methyl, when R^3 is methyl, and when R^2 is H; further provided Q is not phenyl, 3,4-diacetylphenyl or 3,4-dihydroxyphenyl, when W is thiazol-2-yl, when R^1 is H, when R^3 is H, and when R^2 is H; and further provided Q is not 3-cyano-6-methyl-2-oxo-1,2-dihydro-5-pyridyl, when W is thiazol-2-yl, when R^1 is methyl, when R^3 is H, and when R^2 is acetyl.

15. (Currently Amended) A Compound of Claim 14 wherein Q is selected from

R⁶SO₂-(C₁-C₆)alkyl-, R⁴, substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl; wherein R⁴ is independently selected from H, and (C₁-C₂)alkyl; and wherein R⁶ is independently selected from (C₁-C₄)alkyl, optionally substituted phenyl, optionally substituted phenyl-(C₁-C₂)alkyl, optionally substituted furyl-(C₁-C₂)-alkyl, optionally substituted C₃-C₆ cycloalkyl-(C₁-C₂)-alkyl, (C₁-C₃)alkylamino-(C₁-C₃)-alkyl-, phenyloxy-(C₁-C₃)alkyl-, (C₁-C₂)alkylcarbonyl-(C₁-C₂)alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and pharmaceutically acceptable derivatives salts thereof.

16. (Currently Amended) <u>A</u> Compound of Claim 15 wherein Q is selected from phenylsulfonylamino, N-methyl-N-(2-pyridylsulfonyl)amino, N-methyl-N-(3-pyridylsulfonyl)amino, N-methyl-N-(4-pyridylsulfonyl)amino, N-methyl-N-(2-thienylsulfonyl)amino, N-methyl-N-(2-thienylsulfo

methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 3-pyridylsulfonylmethyl, 4-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, 3-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, 3-trifluoromethylbenzyl-sulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 4-chlorophenyl-methylsulfonylmethyl, 2-thienyl, 3-(4-chlorophenylsulfonylmethyl)-2-thienyl, phenyl substituted with one or more substituents selected from

hydroxyl, chloro, fluoro, methoxy, -O-CH₂-O-, amino, aminomethyl, methylsulfonyl, methyl, cyano, trifluoromethyl, and pyrrolyl, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, methyl, ethyl, -NH₂, methoxy, ethoxy, -OH, -CO₂H, phenoxyethylamino, methylamino, dimethylamino, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and pharmaceutically acceptable derivatives salts thereof.

17. (Currently Amended) <u>A</u> Compound of Claim 14, and pharmaceutically acceptable derivatives <u>salts</u> thereof, wherein W is thiazol-4-yl.

- 18. (Currently Amended) <u>A</u> Compound of Claim 14 wherein R¹ is selected from $(C_1\text{-}C_6)$ alkyl, $-(C_1\text{-}C_4)$ alkyl- $N(R^5)_2$, $-(C_1\text{-}C_4)$ alkyl- OR^5 , $(C_3\text{-}C_5)$ cycloalkyl and $-CF_3$; wherein R⁵ is independently selected from H, $C_1\text{-}C_5$ -alkyl, optionally substituted phenyl, optionally substituted benzyl, optionally substituted pyridyl- $(C_1\text{-}C_3)$ -alkyl, optionally substituted thienyl- $(C_1\text{-}C_3)$ -alkyl, optionally substituted piperazinyl- $(C_1\text{-}C_3)$ -alkyl, 4-morpholinyl- $(C_1\text{-}C_3)$ -alkyl, optionally substituted piperidinyl- $(C_1\text{-}C_3)$ -alkyl, optionally substituted piperidinyl- $(C_1\text{-}C_3)$ -alkyl, optionally substituted piperidinyl- $(C_1\text{-}C_3)$ -alkyl, optionally substituted $C_3\text{-}C_6$ cycloalkyl- $(C_1\text{-}C_3)$ -alkyl, amino- $(C_1\text{-}C_4)$ -alkyl-, benzylamino- $(C_1\text{-}C_3)$ -alkyl-, $[N\text{-}(C_1\text{-}C_3)$ -alkyl-N-benzylamino]- $(C_1\text{-}C_3)$ -alkyl-, $-(C_1\text{-}C_3)$ -alkyl-N- $-(C_1\text{-}C_3)$ -alkyl-N- $-(C_1\text{-}C_3)$ -alkyl-NH- $-(C_1\text{-}C_3)$ -alkyl and optionally substituted heterocyclyl selected from piperazinyl, morpholinyl, pyrrolidinyl and piperidinyl; and pharmaceutically acceptable derivatives salts thereof.
- 19. (Currently Amended) A Compound of Claim 18 wherein R¹ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, 1-pyrrolidinyltheyl, benzyloxymethyl, benzyloxymethyl, hydroxyethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl and –CF₃; and pharmaceutically acceptable derivatives salts thereof.
- 20. (Currently Amended) \underline{A} Compound of Claim 14 wherein R^2 is selected from H, halo, (C_1-C_3) alkyl, $-NR^5_2$, $-OR^6$, $-(C_1-C_3)$ alkyl- OR^5 , $-(C_1-C_3)$ alkyl- NR^5_2 , $-C(O)N(R^5)_2$, $-CO_2R^5$, $-(CH_2)_{1-3}$ -(5-6 membered saturated or partially unsaturated) heterocyclyl, 5-6 membered saturated or partially unsaturated heterocyclyl, $-NHC(O)R^5$, and $-C(O)R^5$; wherein R^5 is independently selected from H, C_1-C_5 -alkyl, optionally substituted phenyl, optionally substituted benzyl, optionally substituted pyridyl- (C_1-C_3) -alkyl, optionally substituted thienyl- (C_1-C_3) -alkyl, optionally substituted piperazinyl- (C_1-C_3) -alkyl, 4-morpholinyl-

 (C_1-C_3) -alkyl, optionally substituted pyrrolidinyl- (C_1-C_3) -alkyl, optionally substituted piperidinyl- (C_1-C_3) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_3) -alkyl, amino- (C_1-C_4) -alkyl-, benzylamino- (C_1-C_3) -alkyl-, $[N-(C_1-C_3)$ -alkyl-N-benzylamino]- (C_1-C_3) -alkyl-, - (C_1-C_3) -alkyl-N- $((C_1-C_3)$ -alkyl)₂, - (C_1-C_3) -alkyl-NH- (C_1-C_3) -alkyl and optionally substituted heterocyclyl selected from piperazinyl, morpholinyl, pyrrolidinyl and piperidinyl; and pharmaceutically acceptable derivatives salts thereof.

21. (Currently Amended) A Compound of Claim 20 wherein R² is selected from H, bromo, methyl, hydroxymethyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, (Ndiethylaminoethyl-N-methyl)aminomethyl, (N-dimethylaminoethyl-Nethyl)aminomethyl, 4,5-dihydro-oxazol-2-yl, 5-methyl-4,5-dihydrooxazol-2-yl, 2-furyl, amino, isobutylamino, 3-methylbutylamino, ethylcarbonyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2pyridylmethylaminocarbonyl, 4-pyridylmethylaminocarbonyl, dimethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, propoxycarbonyl, 1methylpropoxycarbonyl, butoxycarbonyl, iso-butoxycarbonyl, tertbutoxycarbonyl, 2-thienylethoxycarbonyl, 4morpholinylethoxycarbonyl, (4-piperidinyl)methoxycarbonyl, (1piperazinyl)ethoxycarbonyl, (1-methyl-piperidin-3-yl)oxycarbonyl, (1methyl-piperidin-4-yl)oxycarbonyl, (1-ethyl-piperidin-3-yl)oxycarbonyl, (1-methyl-pyrrolidin-3-yl)oxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 2oxo-pyrrolidin-1-ylethoxycarbonyl, 2-oxo-pyrrolidin-1ylpropoxycarbonyl, 1-methyl-2-pyrrolidinylethoxycarbonyl, 1piperidinylethoxycarbonyl, diethylaminoethoxycarbonyl, diisopropylaminoethoxycarbonyl, (N-ethyl-N-

benzylamino)ethoxycarbonyl, diethylaminopropoxycarbonyl, dimethylaminoethoxycarbonyl, 2-(dimethylamino)-1- (methyl)ethoxycarbonyl, 2-(diethylamino)-1-(methyl)ethoxycarbonyl, carboxyl, methylcarbonylamino, isobutylcarbonylamino, methylaminomethylcarbonylamino, dimethylaminomethylcarbonylamino, tert-butylaminomethylcarbonylamino, (1-amino-2-methylpropyl)carbonylamino, 1-piperidinylmethylcarbonylamino, 1-piperidinylpropylcarbonylamino, aminomethylcarbonylamino and 1-methyl-4-piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof.

22. (Currently Amended) <u>A</u> Compound of Claim 14 wherein R¹ and R² may be joined together with the pyridone ring to form optionally substituted 2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, optionally substituted 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-quinolin-2-one, optionally substituted 7,8-dihydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and pharmaceutically acceptable derivatives salts thereof.

23. (Currently Amended) <u>A</u> Compound of Claim 22, wherein R¹ and R² are joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-

- 2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and pharmaceutically acceptable derivatives salts thereof.
 - 24. (Currently Amended) A Compound of Claim 14 wherein R³ is H; and pharmaceutically acceptable derivatives salts thereof.
- 25. (Currently Amended) <u>A</u> Compound of Claim 14 wherein A is O; and pharmaceutically acceptable derivatives salts thereof.
- 26. (Currently Amended) <u>A</u> Compound of Claim 14, and pharmaceutically acceptable <u>derivatives salts</u> thereof, wherein A is O; wherein Q is selected from N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from

chloro, fluoro, and -O-CH₂-O-, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, methyl, ethyl, phenoxyethylamino, methylamino, dimethylamino, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylaminoethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl;

wherein R¹ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, hydroxyethyl, benzyloxymethyl, 4-methoxybenzyloxymethyl, methoxymethyl, cyclopropyl, and –CF₃; wherein R² is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4-morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4-piperazinylcarbonyl:

wherein R¹ and R² may be joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 5-propylimino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and wherein R³ is H.

27. (Currently Amended) A compound of Claim 14 having Formula II'

$$\begin{array}{c}
R^7 \\
6 \\
1 \\
2 \\
5 \\
4 \\
3 \\
8 \\
8 \\
11
\end{array}$$

$$\begin{array}{c}
R^8 \\
11
\end{array}$$

wherein R^7 is selected from -(C₁-C₃)alkyl, -(C₁-C₃)alkyl-N(R^{10})₂, -(C₁-C₃)alkyl-O R^{10} , -(C₃-C₅)cycloalkyl, and -CF₃;

wherein R⁸ is selected from R¹⁰SO₂-(C₁-C₆)alkyl-, R¹¹SO₂NH-

R¹¹O₂S N | CH₃ , substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl;

wherein R^9 is selected from H, halo, (C_1-C_3) alkyl, $-NR^{10}_2$, $-(C_1-C_3)$ alkyl- OR^{10} , $-C(O)N(R^{10})_2$, $-CO_2R^{10}$, $(CH_2)_{1-3}$ -(5-6 membered saturated or partially unsaturated heterocyclyl, $-NHC(O)R^{10}$, and $-C(O)R^{10}$;

wherein R^{10} is independently selected from H, (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and

wherein R¹¹ is independently selected from (C₁-C₄)alkyl, optionally substituted phenyl, optionally substituted phenyl-(C₁-C₂)alkyl, optionally substituted furyl-(C₁-C₂)-alkyl, optionally substituted C₃-C₆ cycloalkyl-(C₁-C₂)-alkyl, (C₁-C₃)alkylamino-(C₁-C₃)-alkyl-, phenyloxy-(C₁-C₃)alkyl-, (C₁-C₂)alkylcarbonyl-(C₁-C₂)alkyl, and

optionally substituted heterocyclyl selected from pyridyl and thienyl;

and pharmaceutically acceptable derivatives salts thereof; provided R⁷ is not CF₃ when R⁹ is ethoxycarbonyl and when R⁸ is 4-pyridyl or 2-chloro-4-pyridyl.

28. (Currently Amended) A Compound of Claim 27 wherein R⁷ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, 1-pyrrolidinyltheyl, benzyloxymethyl, benzyloxyethyl, hydroxyethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl and –CF₃; wherein R⁸ is selected from N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from chloro, fluoro, and -O-CH₂-O-,

unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, methyl, ethyl, phenoxyethylamino, methylamino, butylamino, isobutylamino, dimethylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylaminoethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and

wherein R⁹ is selected from H. bromo, methyl, hydroxymethyl, 1,2,5,6tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4piperazinylmethyl, (N-diethylaminoethyl-N-methyl)aminomethyl, (Ndimethylaminoethyl-N-ethyl)aminomethyl, 4,5-dihydro-oxazol-2-yl, 5-methyl-4,5-dihydro-oxazol-2-yl, 2-furyl, amino, isobutylamino, 3methylbutylamino, ethylcarbonyl, aminocarbonyl, 4methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, 4pyridylmethylaminocarbonyl, dimethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, propoxycarbonyl, 1-methylpropoxycarbonyl, butoxycarbonyl, iso-butoxycarbonyl, tert-butoxycarbonyl, 2thienylethoxycarbonyl, 4-morpholinylethoxycarbonyl, (4piperidinyl)methoxycarbonyl, (1-piperidinyl)ethoxycarbonyl, (1piperazinyl)ethoxycarbonyl, (1-methyl-piperidin-3-yl)oxycarbonyl, (1-methyl-piperidin-4-yl)oxycarbonyl, (1-ethyl-piperidin-3yl)oxycarbonyl, (1-methyl-pyrrolidin-3-yl)oxycarbonyl, 1pyrrolidinylethoxycarbonyl, 2-oxo-pyrrolidin-1-ylethoxycarbonyl, 2oxo-pyrrolidin-1-ylpropoxycarbonyl, 1-methyl-2pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminoethoxycarbonyl, di-isopropylaminoethoxycarbonyl, (Nethyl-N-benzylamino)ethoxycarbonyl, diethylaminopropoxycarbonyl, dimethylaminoethoxycarbonyl, 2-(dimethylamino)-1-(methyl)ethoxycarbonyl, 2-(diethylamino)-1-(methyl)ethoxycarbonyl, carboxyl, methylcarbonylamino, isobutylcarbonylamino, methylaminomethylcarbonylamino, dimethylaminomethylcarbonylamino, tertbutylaminomethylcarbonylamino, (1-amino-2methylpropyl)carbonylamino, 1-piperidinylmethylcarbonylamino, 1piperidinylethylcarbonylamino, 1-piperidinylpropylcarbonylamino,

aminomethylcarbonylamino and 1-methyl-4-piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof.

- 29. (Currently Amended) \underline{A} Compound of Claim 27 wherein R^7 is selected from methyl, ethyl, propyl, and isopropyl.
- 30. (Currently Amended) A Compound of Claim 27 wherein R⁸ is selected from phenylsulfonylmethyl and 4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, dimethylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl.
- 31. (Currently Amended) A Compound of Claim 27 wherein R⁹ is selected from methyl, hydroxymethyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, (N-diethylaminoethyl-N-methyl)aminomethyl, (N-dimethylaminoethyl-N-ethyl)aminomethyl, 4,5-dihydro-oxazol-2-yl, 5-methyl-4,5-dihydro-oxazol-2-yl, 2-furyl, amino, isobutylamino, 3-methylbutylamino, ethylcarbonyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, 4-pyridylmethylaminocarbonyl, dimethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, propoxycarbonyl, 1-

methylpropoxycarbonyl, butoxycarbonyl, iso-butoxycarbonyl, tertbutoxycarbonyl, 2-thienylethoxycarbonyl, 4morpholinylethoxycarbonyl, (4-piperidinyl)methoxycarbonyl, (1piperidinyl)ethoxycarbonyl, (1-piperazinyl)ethoxycarbonyl, (1-methylpiperidin-3-yl)oxycarbonyl, (1-methyl-piperidin-4-yl)oxycarbonyl, (1ethyl-piperidin-3-yl)oxycarbonyl, (1-methyl-pyrrolidin-3-yl)oxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 2-oxo-pyrrolidin-1-ylethoxycarbonyl, 2oxo-pyrrolidin-1-ylpropoxycarbonyl, 1-methyl-2pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminoethoxycarbonyl, di-isopropylaminoethoxycarbonyl, (Nethyl-N-benzylamino)ethoxycarbonyl, diethylaminopropoxycarbonyl, dimethylaminoethoxycarbonyl, 2-(dimethylamino)-1-(methyl)ethoxycarbonyl, 2-(diethylamino)-1-(methyl)ethoxycarbonyl, carboxyl, methylcarbonylamino, isobutylcarbonylamino, methylaminomethylcarbonylamino, dimethylaminomethylcarbonylamino, tertbutylaminomethylcarbonylamino, (1-amino-2methylpropyl)carbonylamino, 1-piperidinylmethylcarbonylamino, 1piperidinylethylcarbonylamino, 1-piperidinylpropylcarbonylamino, aminomethylcarbonylamino and 1-methyl-4-piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof.

32. (Currently Amended) <u>A</u> Compound of Claim 27 and pharmaceutically acceptable derivatives <u>salts</u> thereof selected from:

6-Isopropyl-5-methyl-3-(2-pyrindin-4-yl-thiazol-4-yl)-1*H*-pyridin-2-one;
6-Ethyl-5-isopropionyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1*H*-pyridin-2-one;
2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-ethyl ester;

- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-ethyl-piperidin-3-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-dimethylamino-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-dimethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-piperidin-3-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-ethyl-pyrrolidin-3-yl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid piperidin-4-ylmethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6pyridine-3-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(benzyl-methyl-amino)-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-propyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6pyridine-3-carboxylic acid 2-(1-methyl-pyrrolidin-2-yl)-ethyl ester;
- 5-[2-(2-Dimethylamino-pyridin-4-yl)-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydro-pyridine-3-carboxylic acid ethyl ester;

- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-piperazin-1-yl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-propyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-pyrrolidin-3-yl ester;
- 3-(2-Benzenesulfonylmethyl-thiazol-4-yl)-6-isopropyl-5-methyl-1*H*-pyridin-2-one;
- 3-(2-Benzenesulfonylmethyl-thiazol-4yl)-6-ethyl-5-propionyl-1*H*-pyridin-2-one;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-morpholin-4-yl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid phenethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid piperidin-4-ylmethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-thiophen-2-yl-ethyl ester;
- 5-(4,5-Dihydro-oxazol-2-yl)-6-isopropyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 5-{[(2-Dimethylamino-ethyl)-ethyl-amino]-methyl}-6-ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-piperidin-1-yl-ethyl ester;
- 5-{[(2-Diethylamino-ethyl)-methyl-amino]-methyl}-6-ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 2-(2-Hydroxy-ethyl)-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid ethyl ester;
- 2-Amino-N-[2-ethyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridin-3-yl]-acetamide;

- 2-tert-Butylamino-N-[2-ethyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridin-3-yl]-acetamide;
- 6-Ethyl-5-(3-methyl-butylamino)-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- Ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl-2-ethyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl-2-ethyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-2-(trifluoromethyl)-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl-6-oxo-5-{2-[(2-pyridylsulfonyl)methyl](1,3-thiazol-4-yl)}-2- (trifluoromethyl)-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-2- (trifluoromethyl)-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl 2-isopropyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl 2-isopropyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl 2-isopropyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl 2-propyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl 2-propyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate;
- Ethyl 2-propyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;

- Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate;
- Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3carboxylate;
- Ethyl 2-methyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3-thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3-thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- (Ethyl 2-methyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl]methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-{2-(phenylthiomethyl)(1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(2-chloro(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-(2-{[(2-furylmethyl)sulfonyl]methyl}(1,3-thiazol-4-yl))-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-(2-{[(2-furylmethyl)sulfonyl]methyl}(1,3-thiazol-4-yl))-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate
- Ethyl 5-[2-(2-ethyl(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-(2-((2-methylpropyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(2-((3-pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(2-((phenylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;

- Ethyl 2-methyl-5-(2-((2-((1-methylethyl)amino)ethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-(2-(2-((2-(diethylamino)ethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-(2-{2-[(fur-2-ylmethyl)-amino]-pyridin-4-yl}-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-(2-thien-2-yl-ethylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(2-butylamino-pyridin-4-yl)-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-(carbamoylmethyl-amino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-acetylamino-ethylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 5-{2-[2-(Cyclopropylmethylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid cyclopropyl-methyl amide;
- Ethyl 5-{2-[2-(cyclopropylmethyl-amino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 5-{2-[2-(Cyclopentyl)methylamino-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 5-{2-[2-(4-Methoxybenzylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid 4-methoxy-benzylamide;
- Ethyl 2-methyl-6-oxo-5-(2-(2-amino-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-[2-(methylamino)(1,3-thiazol-4-yl)]-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 6-Methyl-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))hydropyridin-2-one;
- Ethyl 2-methyl-5-(2-(2-(methyloxy)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;

- Ethyl 2-methyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-{2-[(2-pyridylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-(2-(1-methyl-1-(phenylsulfonyl)ethyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-cyclopropyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-cyclopropyl-6-oxo-5-(2-((phenylsulfonyl)methyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- 5-Bromo-6-methyl-3-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)-pyridinone;
- Ethyl 2-methyl-5-(2-(2-(methylamino)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate
- 5-Amino-6-ethyl-3-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)-pyridinone;
- 6-Methyl-3-(2-(2-((2-pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)-pyridinone;
- Ethyl 2-methyl-6-oxo-5-(2-(2-((2-pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(methylamino-pyridin-4-yl)-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 1,1-Dimethylethyl 2-methyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- 2-(1-Pyrrolidinyl)ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- 6-Ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 6-Isopropyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 3-(Diethylamino)propyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;

- 3-(Diethylamino)propyl 2-(1-methylethyl)-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; and
- 5-Hydroxymethyl-6-methyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one.
- 33. (Currently Amended) <u>A</u> Compound of Claim 27 and pharmaceutically acceptable <u>derivatives</u> <u>salts</u> thereof selected from:
- 6-Isopropyl-5-methyl-3-(2-pyrindin-4-yl-thiazol-4-yl)-1*H*-pyridin-2-one;
- 3-(2-Benzenesulfonylmethyl-thiazol-4-yl)-6-isopropyl-5-methyl-1*H*-pyridin-2-one;
- 6-Ethyl-5-isopropionyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1*H*-pyridin-2-one;
- 3-(2-Benzenesulfonylmethyl-thiazol-4yl)-6-ethyl-5-propionyl-1*H*-pyridin-2-one;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-ethyl-piperidin-3-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-piperidin-3-yl ester;
- 2-lsopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-dimethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(benzyl-methyl-amino)-ethyl ester;

- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-piperidin-4-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-propyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid phenethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-thiophen-2-yl-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-propyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6pyridine-3-carboxylic acid 2-(1-methyl-pyrrolidin-2-yl)-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid methyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid propyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid butyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid isobutyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid sec-butyl ester;
- 5-{[(2-Diethylamino-ethyl)-methyl-amino]-methyl}-6-ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 5-[2-(2-Dimethylamino-pyridin-4-yl)-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydro-pyridine-3-carboxylic acid ethyl ester;

- Ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-ethyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-ethyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-isopropyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-isopropyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-isopropyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-propyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-propyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate:
- Ethyl 2-propyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate;
- Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3carboxylate;
- Ethyl 2-methyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3-thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3-thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;

- Ethyl 2-methyl-6-oxo-5-{2-(phenylthiomethyl)(1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(2-ethyl(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(2-chloro(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(3,5-Dichloro-pyridin-4-yl)-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-(2-((2-methylpropyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(2-((3-pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(2-((phenylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-(2-((2-((1-methylethyl)amino)ethyl)amino)-4pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-(2-(2-((2-(diethylamino)ethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-(2-{2-[(fur-2-ylmethyl)-amino]-pyridin-4-yl}-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-(2-thien-2-yl-ethylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(2-butylamino-pyridin-4-yl)-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-(carbamoylmethyl-amino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-acetylamino-ethylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 5-{2-[2-(Cyclopropylmethylamino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxohydro-pyridine-3-carboxylic acid cyclopropyl-methyl amide;

- Ethyl 5-{2-[2-(cyclopropylmethyl-amino)-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-{2-[2-(cyclopentyl)methylamino-pyridin-4-yl]-thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(2-(amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-[2-(methylamino)(1,3-thiazol-4-yl)]-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-6-oxo-5-{2-[(2-pyridylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-methyl-5-(2-(1-methyl-1-(phenylsulfonyl)ethyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- Ethyl 2-cyclopropyl-6-oxo-5-(2-((phenylsulfonyl)methyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- 5-Bromo-6-methyl-3-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)-pyridinone;
- Ethyl 2-methyl-5-(2-(2-(methylamino)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 2-Methyl-6-oxo-N-(2-pyridinylmethyl)-5-(2-(2-((2-pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxamide;
- Ethyl 2-methyl-6-oxo-5-(2-(2-((2-pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- Ethyl 5-[2-(methylamino-pyridin-4-yl)-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
- 1,1-Dimethylethyl 2-methyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;

- 2-(1-Pyrrolidinyl)ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- 6-Ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 6-Isopropyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 3-(Diethylamino)propyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; and
- 3-(Diethylamino)propyl 2-(1-methylethyl)-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate.
- 34. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and <u>an effective</u> <u>amount of</u> a compound of Claim 1 <u>or a pharmaceutically acceptable salt thereof.</u>
- 35. (Withdrawn) A method of inhibiting cell proliferation which comprises administering an effective amount of a compound of Claim 1 and ethyl 2-trifluoromethyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate.
- 36. (Withdrawn) A method of treating cancer which comprises administering an effective amount of a compound of Claim 1 and ethyl 2-trifluoromethyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate.
- 37. (Withdrawn) A method of inhibiting a serine/threonine kinase which comprises administering an effective amount a compound of Claim 1 and ethyl 2-trifluoromethyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate.

- 38. (Withdrawn) A method of treating a neurological disorder which comprises administering an effective amount a compound of Claim 1 and ethyl 2-trifluoromethyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate.
- 39. (Withdrawn) A method of treating apoptosis comprising administering an effective amount a compound of Claim 1 and ethyl 2-trifluoromethyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate.